What is claimed is:

1. An instrument, comprising:

a gripping portion;

a small diameter instrument portion extending from the gripping portion, the small diameter instrument portion having a length; and

a support member that engages the small diameter instrument portion along the length, providing lateral support, wherein an unsupported distal portion of the length is adjustable.

2. The instrument of claim 1, wherein the small diameter instrument portion includes a hollow tube portion.

3. The instrument of claim 1, wherein the support member includes a strut coupled to a cylinder that at least partially surrounds the small diameter instrument portion.

4. The instrument of claim 1, wherein the small diameter instrument portion is directly coupled to the gripping portion and the support member is movable relative to the gripping portion.

5. The instrument of claim 1, wherein the support member is directly coupled to the gripping portion and the small diameter instrument portion is movable relative to the gripping portion.

6. A vitrectomy instrument, comprising:

a gripping portion;

a small diameter instrument portion extending from the gripping portion, the small diameter instrument portion having a length;

support means to provide lateral support for the small diameter instrument portion along the length; and

adjustment means for adjusting an amount of support for the small diameter instrument portion.

7. A vitrectomy instrument, comprising:

a gripping portion;

a small diameter instrument portion extending from the gripping portion, the small diameter instrument portion having a length;

a cylinder surrounding a part of the small diameter instrument portion along the length, the cylinder being slidable along the length;

a strut connected between the cylinder and the gripping portion to provide flexural support to at least part of the small diameter instrument portion, and to move the cylinder to various locations along the length; and

a control coupled to the strut.

8. The vitrectomy instrument of claim 7, wherein the small diameter instrument portion includes a 25 gauge instrument.

9. The vitrectomy instrument of claim 8, wherein the cylinder includes a 20 gauge cylinder portion.

10. The vitrectomy instrument of claim 7, wherein the cylinder and strut include stainless steel.

11. The vitrectomy instrument of claim 7, wherein the small diameter instrument portion is directly coupled to the gripping portion and the strut is movable relative to the gripping portion.

12. The vitrectomy instrument of claim 7, further including a mechanism for selectively holding a location of the strut relative to the small diameter instrument portion.

13. A vitrectomy instrument, comprising:

a gripping portion;

a first hollow tube portion extending from the gripping portion;

a small diameter instrument portion sliding substantially within the first hollow tube portion, wherein a distal length of the small diameter instrument portion is exposed; and

a control coupled to the small diameter instrument portion to adjust an amount of the distal length.

14. The vitrectomy instrument of claim 13, wherein the first hollow tube portion is directly attached to the gripping portion.

15. The vitrectomy instrument of claim 13, wherein the control includes a thumb wheel that engages a toothed member on the small diameter instrument portion.

16. The vitrectomy instrument of claim 13, wherein the control includes a lever that is directly coupled to the small diameter instrument portion.

17. A method, comprising:

engaging a portion of an eye using a small diameter instrument portion;

providing lateral support to a distal end of the small diameter instrument portion;

imparting a lateral force on the eye at the distal end of the small diameter instrument portion; and

adjusting the position of lateral support relative to the small diameter instrument portion to allow deeper insertion of the small diameter instrument portion into the eye.

18. The method of claim 17, wherein engaging the portion of the eye includes penetrating a portion of the surface of the eye through an incision.

19. The method of claim 17, wherein providing lateral support to the distal end of the small diameter instrument portion includes locating a strut adjacent to the small diameter instrument portion at a location along a length of the small diameter instrument portion.

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20. The method of claim 17, wherein providing lateral support to the distal end of the small diameter instrument portion includes sheathing a portion of the small diameter instrument portion with a larger diameter tube.